

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018670**Date Inspected:** 01-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Tian Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

Bay 1

This QA Inspector observed the following work in progress for Bay 21.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Ju Lin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Traveler Rail

PCMK: 20TR2-041-013

Welder: 216575

Report: B-WR 16947

WPS-345-FCAW-2G (2F)-Repair

PCMK: 20TR2-044-009

Welder: 216872

Report: B-WR 17750

WPS-345-FCAW-2G (2F)-Repair

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Heat straightening of PCMK, E2-SB1D-030, under approved Heat Straightening procedure, HSR 1(B)-9389, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Ju Lin. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 80mm.

Bay 2

Heat straightening of PCMK, SA3445-001, under approved Heat Straightening procedure, HSR 1(B)-9810, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Ju Lin. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 7mm.

Bay 3

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Ju Lin.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Segment Assembly

PCMK: SEG3019K-001-191,194

Welder: 055564

WPS-B-T-2233-ESAB

PCMK: SEG3019K-001-213,216

Welder: 044790

WPS-B-T-2233-ESAB

Bay 7

This QA Inspector observed the following work in progress for Bay 7.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhu Jun Jie.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Cross Beam

PCMK: CB3003J-002-031,032

Welder: 055795

WPS-B-P-2114-FCM

PCMK: CB3003D-001-014~046

Welder: 215083

WPS-B-P-2113-Padeye

Bay 8

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This QA Inspector observed the following work in progress for Bay 8.

ZPMC was using the Shield Metal Arc Welding (FCAW) process.

ZPMC QC is identified as Li Jia.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Bike Path

PCMK: BK004A-058

Welder: 058009

WPS-345-SMAW-3G (3F)-Repair

Bay 10

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; BK004ASD1-026, on item number 1 of NWIT tracker document # 07579

Bay 14

This QA inspector performed Ultrasonic Testing (UT) of approximately 10 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; SEG3013U, on Item number 2 of NWIT tracker document # 07580,

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for

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your project.

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| Inspected By: | Shin,DJ | Quality Assurance Inspector |
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| Reviewed By: | Carreon,Albert | QA Reviewer |
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